CLAIMS

1. Method for dimensioning a network based on Code Division Multiple Access techniques or CDMA for input parameters that are representative of coverage requirements and/or capacity requirements and/or quality requirements able to provide at least a value of maximum sustainable load per cell (η_{MAX}) given a plurality of services provided, comprising the steps of:

- determining a load factor per cell (η_{UL}, η_{DL}) on the basis of the input parameters;

characterised by the steps of:

- verifying whether the determined load factor (η_{UL}, η_{DL}) corresponds to the maximum load sustainable (η_{MAX}) by a base terminal station or BTS and, if the determined load factor (η_{UL}, η_{DL}) exceeds the maximum sustainable load (η_{MAX});

- negotiating at the Radio Resource Management (RRM) level at least one of the services provided in said network in such a way that the determined load factor (η_{UL}, η_{DL}) becomes smaller than or equal to the maximum sustainable load (η_{MAX}) or is optimised taking into account the characteristics of the network.

2. Method as claimed in claim 1, characterised in that the load factor is determined taking into account real "power control" procedures, by attributing to the ratio between useful signal power and total interference density of the BTS a normal or Gaussian distribution in decibels.

3. Method as claimed in claim 1 or 2, characterised in that the step of determining the load factor is carried out for the uplink radio path.

4. Method as claimed in claim 3, characterised in that the step of negotiating at least one of the services provided comprises the step of negotiating one among the functionalities of

- packet scheduling;
- congestion control; and
- admission control.

5. Method as claimed in claims 1 or 2, characterised in that the step of determining the load factor is carried out for the downlink radio path

6. Method as claimed in claim 5, characterised in that the step of negotiating at least one of the services provided comprises the step of negotiating one among the functionalities of

- code management;
- power management;
- packet scheduling;
- congestion control; and
- admission control.

7. Method for dimensioning a network based on Code Division Multiple Access techniques or CDMA for input parameters that are representative of coverage requirements and/or capacity requirements and/or quality requirements able to provide at least a value of maximum sustainable load per cell (η_{MAX}) and a maximum number of radio channels associated with corresponding codes provided for a plurality of services provided, comprising the steps of:

- determining by means of "link budget" a load factor per cell for the uplink radio path (η_{UL});

and characterised by the steps of:

- verifying whether the determined load factor (η_{UL}) corresponds to the maximum load sustainable (η_{MAX}) by a base terminal station or BTS, and if the outcome of the verification is positive;
- determining by means of "pole capacity" the number of radio channels and corresponding associated codes for the downlink radio path;
- verifying whether the codes provides can be hosted in the associated codes and if the number of associated codes exceeds the codes provided for at least one service;
- negotiating at the Radio Resource Management (RRM) level at least one of the services provided in said network in such a way as to update the maximum sustainable load (η_{MAX}).

8. Method as claimed in claim 7, characterised by the further steps of

- determining for each service a load factor per cell (η_{DL}) and corresponding values of power per channel for the downlink radio path;
- verifying whether the power per channel of at least one service exceeds power limits prescribed for said service and, if the power per channel of at least one service exceeds the prescribed power limits;
- negotiating said service at the Radio Resource Management (RRM) level in such a way as to update the maximum sustainable load (η_{MAX}).

9. System for dimensioning a radio network based on Code Division Multiple Access or CDMA techniques, comprising a computerised work station (50) programmed for implementing the method as claimed in any of the previous claims.

10. Computer product able to be loaded directly into the internal memory of a computerised work station (50) and comprising portions of software code to carry out, when the product is executed on the work station, the method as claimed in any of the claims from 1 through 8.